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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,694	08/21/2000	Teiji Kohara	001046	8839

23850 7590 06/20/2003

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EXAMINER

TON, ANABEL

ART UNIT PAPER NUMBER

2875

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/622,694

Applicant(s)

KOHARA ET AL.

Examiner

Anabel M Ton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

P r i d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 9-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 26-30 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-15, 17-21 and 23-25, 31, 32 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,9,11-15,17-21,23-25,31,32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurfman (4,612,216).

3. Kurfman discloses a substrate comprised of a thermoplastic resin containing an alicyclic structure on which provided is a metal film (abstract).

4. The recitation “ a reflector for a lighting equipment comprising” and “a lamp cover for a lighting equipment provided in front of a light source and allowing passage of light of the light source, said lamp cover for a lighting equipment comprised of” and “a lamp cap for a lighting equipment has not been given any patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478.

5. The substrate is comprised of a resin composition containing a thermoplastic resin containing an alicyclic structure and at least one compounding agent selected from the group consisting of a partial ether compound of a polyhydric alcohol, a soft

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polymer a filler, and a compound incompatible with the thermoplastic resin having an alicyclic structure.

6. The substrate is comprised of a resin composition comprised of a thermoplastic resin containing an alicyclic structure to which is blended a soft polymer having a glass transition temperature of not more than 30°C;

7. The substrate is comprised of a resin composition comprised of a thermoplastic resin containing an alicyclic structure to which is blended a crystalline polymer.

8. The substrate is comprised of at least one type of thermoplastic resin containing an alicyclic structure selected from the group consisting of a ring-opening polymer of a norbornene-based monomer

9. The thermoplastic resin containing an alicyclic structure has a melt flow rate, measured by JIS-K6719 at a temperature of 280°C and a load of 2.16 kgf of 4 to 100 g/10min.

10. The thermoplastic resin containing an alicyclic structure has repeating units comprised of ring structures other than norbornene rings.

Claim Rejections - 35 USC § 103

11. Claims 2-6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurfman.

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12. With regards to the lighting equipment comprising a lens for condensing reflected light, a lamp cover allowing passage of light from the reflector, a lamp cap covering part or all of the light source and a light guide having a light incident face to which is introduced at least one type of light source, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide these features to a lighting equipment with a reflector since it is old and well-known that reflectors have condensing lenses implemented in them for the purpose of condensing emitted light reflected from the reflector; a lamp cover for the purpose of shielding the interior components of the lighting device; a lamp cap for providing a "shade" or a reflecting component reflecting light rearwardly to the reflector; or a light guide for propagating light to a desired direction.

13. With regards to the reflective layer with a reflectance of at least 70%, it would have been obvious to one of ordinary skill in the art at the time the invention was made to require a 70% reflectance for a reflective surface since it is old and well known in the illumination art that reflectors (especially those used in the automotive illumination art) have a reflectance of at least 70% to provide a desired light emission for specific applications.

14. With regards to the reflecting layer has a thickness of 5 to 10,000 nm, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have such a thickness for a reflecting layer since, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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15. With regards to the reflecting layer is provided by vapor deposition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use vapor deposition as a method of applying a reflecting layer to a surface since such a method of application is old and well known in the art for the purpose of providing an even layer of application.

Allowable Subject Matter

16. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Claims 22,26-30 are allowed.

18. The following is an examiner's statement of reasons for allowance: The prior art cited does not recite the following:

- A light guide for a lighting equipment provided in a light chamber of the lighting equipment and having a light incident face to which is introduced at least one type of light selected from the group of light front a light source and light from a light source reflected by a reflector and an emission face emitting the incident light introduced from the incident surface to the outside said light guide for resin containing an alicyclic structure having a glass resin containing an alicyclic structure having a glass transition temperature of at least 90°C selected from the

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group consisting of a ring-opening polymer of a norbornene-based monomer, a ring-opening polymer hydrogenate of a norbornene-based monomer, an addition polymer of a norbornene-based monomer, an addition polymer of a norbornene-based monomer and vinyl compound, and a vinyl alicyclic hydrocarbon polymer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M Ton whose telephone number is (703) 305-1084. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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Anabel M Ton
Examiner
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AMT
June 15, 2003

A handwritten signature in black ink, appearing to read 'Thomas M. Sember', written in a cursive style.

THOMAS M. SEMBER
PRIMARY EXAMINER